

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim Listing:

1. (Currently Amended) A user equipment (UE) including a transmitter for transmitting a data field of symbols, the transmitter comprising:

a first and second antenna for transmitting said data field of symbols, wherein said data field includes a first data field;

an encoder for encoding said data field producing a second data field having complex conjugates of the symbols of said data field; and

a first ~~and second~~ spreading channelization device for receiving the data field including the first data field and spreading said first ~~and second~~ data fields field, wherein said first ~~spreading~~ channelization device spreads said first data field using a first channelization code that is uniquely associated with the first antenna; ~~and and said second spreading device spreads said second data field using a second channelization code, each channelization code being uniquely associated with one of said first and second antennas.~~

a second channelization device for receiving the second data field from the encoder and spreading said second data field using a second channelization code, the second channelization code being uniquely associated with the second antenna.

2. (Original) The UE of claim 1 wherein said transmitter further comprises a first and second scrambling device for scrambling said first and second spread data fields by a single scrambling code associated with said transmitter.

3. (Original) The UE of claim 2 wherein the symbols of said first data field of symbols are grouped into a first and second sub-data field.

4. (Original) The UE of claim 3, wherein the symbols of said second data field of symbols are grouped into a third and fourth sub-data field, said third sub-data field being the negative complex conjugate of said second sub-data field and said fourth sub-data field being the complex conjugate of said first sub-data field.

5-8. (Canceled).

9. (Currently Amended) A user equipment (UE) including a transmitter for transmitting a data field of symbols, the transmitter comprising:

a first and second antenna for transmitting said data field of symbols; and

a first ~~and second spreading~~ channelization device for spreading said data field, wherein said first ~~spreading~~ channelization device spreads said data field using a first channelization code that is uniquely associated with the first antenna, producing a first spread data field; ~~and, and said second spreading device spreads said data field using a second channelization code, producing a second spread data field, each channelization code being uniquely associated with one of said first and second antennas.~~

a second channelization device for spreading said data field using a second channelization code that is uniquely associated with the second antenna, producing a second spread data field.

10. (Original) The UE of claim 9 further comprising a first and second scrambling device for scrambling said first and second spread data fields by a single scrambling code associated with said transmitter.

11-12. (Canceled).